# OFFICE OF THE PURCHASING AGENT

# TOWN OF ARLINGTON 730 Massachusetts Avenue Arlington, MA 02476

Telephone (781) 316-3003 Fax (781) 316-3019

DATE:

April 3, 2013

TO ALL BIDDERS

BID NO.

13-04

SUBJECT:

6th Floor Office Renovation/Arlington High School

# ADDENDUM NO. 1

# TO WHOM IT MAY CONCERN:

With reference to the bid request relative to the above subject, please note the following:

# **SEE ATTACHED**

# BIDDER MUST ACKNOWLEDGE ADDENDUM WITH SUBMISSION

All other terms, conditions and specifications remain unchanged.

Very truly yours,

Town of Arlington

Domenic R. Lanzillotti Purchasing Officer



DATE: April 2, 2013

# **ADDENDUM NO. 1**

6<sup>TH</sup> FLOOR OFFICE RENOVATION ARLINGTON HIGH SCHOOL

This addendum becomes an integral part of the bid documents and <u>must</u> be acknowledged on the bid form.

# **ATTACHMENTS**

Specifications & Documents 087100 Door Hardware

# **Drawings**

SKM-1

SKE-1

SKE-2

# **CHANGES TO THE SPECIFICATION:**

# AD1-1 SECTION 087100 DOOR HARDWARE

Replace entire section with revised Section 087100, refer to highlighted areas for changes.

# AD1-2 SECTION 230000 HVAC

- A. Paragraph 1.3 Work To Be Performed, Sub-Paragraph C, Delete to word "complete" from this sentence.
- B. Paragraph 1.27 Alternates, Sub-Paragraph B, Replace the last sentence with the following: "Refer to SKM-1 for limit of work."

# AD1-3 SECTION 260000 ELECTRICAL

C. Paragraph 1.23 Alternates, Replace with the following:

# 1.23 ALTERNATES

- A. Refer to Section 01 23 00 for Alternates affecting this section.
- B. Include in your bid a separate price for amounts to be added or deducted from base bid amount for the following areas of electrical work:
  - Alternate No. 1: Eliminate work associated with creating Rooms 608C and 609C as indicated on drawings. Provide modifications per plans and specifications.

- 2. Alternate No. 2: Delete electrical work associated with new rooftop unit RTU-1. Provide modifications per plans and specifications.
- D. Paragraph 1.24 Unit Prices, Replace with the following:

# 1.24 UNIT PRICES

- A. Additional work shall be performed by contractor as directed at unit prices bid. If any work is eliminated, the eliminated work shall be credited at unit price list. Include in your bid form unit prices for the work described below.
- B. Unit prices shall include materials, labor, overhead, and profit necessary for complete installation of item.
- C. Unit price items shall include devices or fixtures wired complete in accordance with specifications.

<u>ITEM</u>

**UNIT PRICE** 

# 1. DUPLEX RECEPTACLE OUTLET:

a. Description: 20A/120 Volt Duplex
 Receptacle with 25 feet of wiring
 b. Unit of Measure: Per Receptacle

# 2. DATA BACKBOX INFRASTRUCTURE

a. Description: Data Backbox and
12' of conduit with pull string
b. Unit of Measure: Per Backbox

# **CHANGES TO THE DRAWINGS:**

- AD1-4 DRAWING M1.1 HVAC 6<sup>th</sup> FLOOR DUCTWORK VENTILATION LAYOUT

  A. Incorporate the clarifications and/or revisions on the following sketch: SKM-1.
- AD1-5 DRAWING E0.1 SYMBOL LIST, LIGHTING FIXTURE SCHEDULE AND NOTES

  B. Incorporate the clarifications and/or revisions on the following sketch: SKE-1.
- AD1-6 DRAWING E2.1 NEW POWER PLAN ELECTRICAL
  - C. Incorporate the clarifications and/or revisions on the following sketch: SKE-2.

END OF ADDENDUM NO. 1 (see attachments)

# SECTION 08 71 00: DOOR HARDWARE

### PART 1 - GENERAL

### 1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

# 1.02 SUMMARY

### A. Section Includes

1. Furnishing and installation of all mechanical and electrical finish hardware necessary for all doors, and hardware as specified herein and as enumerated in hardware sets and as indicated and required by actual conditions at the building. The hardware shall include the furnishing of all necessary screws, bolts, expansion shields, drop plates, and all other devices necessary for the proper application of the hardware. Installation shall include field modification and preparation of existing doors and/or frames for new hardware being installed. Provide necessary fillers, Dutchmen, reinforcements, and fasteners for mounting new hardware and to cover existing door/frame preps.

# B. Related Sections

- Division 6 Section Finish Carpentry
- 2. Division 8 Section Hollow Metal Doors and Frames
- 3. Division 8 Section Wood Doors
- 4. Division 8 Section Aluminum Framed Storefronts
- S. Division 8 Section Glass and Glazing
- C. Specific Omissions: Hardware for the following is specified or indicated elsewhere, unless specifically listed in the hardware sets:
  - 1. Windows
  - 2. Cabinets of all kinds, including open wall shelving and locks.
  - 3. Signage, except as noted.
  - 4. Complete toilet accessories including coat hooks, unless note otherwise.
  - S. Overhead doors, unless noted otherwise.

# 1.03 REFERENCES

- A. Applicable state and local building codes and standards.
- B. FIRE/LIFE SAFETY

- 1. NFPA National Fire Protection Association
  - a. NFPA 70 National Electric Code
  - b. NFPA 80 Standard for Fire Doors and Fire Windows
  - c. NFPA 101 Life Safety Code
  - d. NFPA 10S Smoke and Draft Control Door Assemblies
- C. UL Underwriters Laboratories
  - UL 10C Positive Pressure Test of Fire Door Assemblies
  - 2. UL 1784 Air Leakage Tests of Door Assemblies
  - 3. UL 305 Panic Hardware
- D. Accessibility
  - 1. ADA Americans with Disabilities Act
  - Massachusetts Architectural Access Board Regulation \$21 CMR
- E. DHI Door and Hardware Institute
  - 1. Sequence and Format for the Hardware Schedule
  - 2. Recommended Locations for Builders Hardware
- F. ANSI American National Standards Institute
  - 1. ANSI/BHMA A1S6.1 A1S6.29, and ANSI A156.31 Standards for Hardware and Specialties

# 1.04 SUBMITTALS

- A. General: Submit the following in accordance with Conditions of Contract and Division 1 requirements. Prior to submittal field verify existing doors and/or frames receiving new hardware and/or existing conditions receiving new openings. Verify new hardware is compatible with the existing door/frame preparation and/or existing conditions. Advise architect within the submittal package of incompatibility or issues.
- B. Catalog Cuts: Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
- C. Final Hardware Schedule Content: Submit schedule with hardware sets in vertical format as illustrated by the Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Indicate complete designations of each item required for each door or opening, Include the following information:
  - 1. Door Index; include door number, heading number, and Architects hardware set number.
  - Opening Lock Function Spreadsheet; list locking device and function for each opening.

- 3. Type, style, function, size, and finish of each hardware item.
- 4. Name and manufacturer of each item.
- 5. Fastenings and other pertinent information.
- 6. Location of each hardware set cross-referenced to indications on Drawings.
- 7. Explanation of all abbreviations, symbols, and codes contained in schedule.
- 8. Mounting locations for hardware.
- 9. Door and frame sizes and materials.
- 10. Name and phone number for the local manufacturer's representative for each product.
- D. Key Schedule: After a keying meeting between representatives of the Owner, Architect, hardware supplier, and, if requested, the representative for the lock manufacturer, provide a keying schedule, listing the levels of keying, as well as an explanation of the key system's function, the key symbols used, and the door numbers controlled. Utilize ANSI A1S 6.28 "Recommended Practices for Keying Systems" as a guideline for nomenclature, definitions, and approach for selecting the optimal keying system.
- E. Samples: If requested by the Architect, submit production sample or sample installations as requested of each type of exposed hardware unit in the finish indicated, and tagged with a full description for coordination with the schedule.
  - 1. Samples will be returned to the supplier in like-new condition. Units that are acceptable to the Architect may, after final check of operations, be incorporated into the Work, within limitations of key coordination requirements.
- F. Templates: After final approval of the hardware schedule, provide templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware.
- G. Riser and Wiring Diagrams: After final approval of the hardware schedule, submit riser and wiring diagrams as required for the proper installation of complete electrical, electromechanical, and electromagnetic products.
- H. Operations and Maintenance Data: Provide in accordance with Division 1 and include the following:
  - 1. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
  - 2. Catalog pages for each product.
  - 3. Name, address, and phone number of local representative for each manufacturer.
  - Parts list for each product.
  - 5. Copy of final approved hardware schedule, edited to reflect "As installed."
  - 6. Copy of final keying schedule.

- One (1) complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
- 8. Copy of warranties including appropriate reference numbers for manufacturers to identify the project.
- Certificates of Compliance: Upon request of Architect or Authority Having Jurisdiction certificates of compliance for fire-rated hardware and installation instructions shall be made available.

### 1.05 QUALITY ASSURANCE

- A. Substitutions: Products are to be those specified to ensure a uniform basis of acceptable materials. Requests for substitutions must be made in accordance with Division 1 requirements. If proposing a substitute product, submit product data for the proposed item with product data for the specified item and indicate basis for substitution and savings to be made. Provide sample if requested. Certain products have been selected for their unique characteristics and particular project suitability.
  - 1. Items specified as "no substitute" shall be provided exactly as listed.
  - Items listed with no substitute manufacturers listed have been requested by the Owner or Architect
    to match existing for continuity and/or future performance and maintenance standards or because
    there is no known equal product.
  - 3. If no other products are listed in a category, then "no substitute" is implied.
- B. Supplier Qualifications: A recognized architectural hardware supplier, with warehousing facilities in the Project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that provides a certifled Architectural Hardware Consultant (AHC) available to the Owner, Architect, and Contractor, at reasonable times during the course of the Work for consultation.
- C. Single Source Responsibility: Obtain each type of hardware (latch and locksets, hinges, exit devices, closers, etc.) from a single manufacturer.
- D. Fire-Rated Openings: Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by Underwrites Laboratories, Intertek Testing Services, or other testing and inspecting organizations acceptable to the authorities having jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.
- Electronic Security Hardware: When electrified hardware is included in the hardware specification, the hardware supplier must employ an individual knowledgeable in electrified components and systems, who is capable of producing wiring diagrams and consulting as needed. Coordinate installation of the electronic security hardware with the Architect and electrical engineers and provide installation and technical data to the Architect and other related subcontractors. Upon completion of electronic security hardware installation, inspect and verify that all components are working properly.

# 1.06 DELIVERY, STORAGE, AND HANDLING

A. Tag each item or package separately with identification related to the final hardware schedule, and include installation instructions with each item or package.

- B. Each article of hardware shall be individually packaged in manufacturer's original packaging.
- C. Contractor will provide secure lock-up for door hardware delivered to the Project, but not yet installed. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- D. Items damaged in shipment shall be replaced promptly and with proper material and paid for by whomever did the damage or caused the damage to occur.
- E. Hardware shall be handled in a manner to avoid damage, marring, or scratching. Irregularities that occur to the hardware after it has been delivered to the Project shall be corrected, replaced, or repaired by the Contractor. Hardware shall be protected against malfunction due to paint, solvent, cleanser, or any chemical agent.
- F. No direct shipments will be allowed unless approved by the Contractor.

### 1.07 WARRANTY

- A. Provide manufacturer's warrantees as specified in Division 1 and as follows:
  - 1. Closers: 10 years.
  - 2. Locksets: 3 years; except electrified locksets, 1 year.
  - 3. Other hardware: 1 year.
- B. No liability is to be assumed where damage or faulty operation is due to improper installation, improper use, or abuse.
- C. Products Judged to be defective during the warranty period shall be replaced or repaired in accordance with the manufacturer's warranty, at no additional cost to the Owner.

### 1.08 MAINTENANCE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

# PART 2 - PRODUCTS

# 2.01 MANUFACTURERS

- A. The Awarding Authority has determined that certain products should be selected for their unique characteristics and particular project suitability to insure continuity of existing and future performance and maintenance standards. After investigating available product offerings the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute" (NO OTHER PRODUCTS WILL BE CONSIDERED FOR THOSE LISTED IN PROJECTS DOCUMENTS.)
- B. Approval of manufacturers other than those listed shall be in accordance with paragraph 1.0S.A.
- C. Note that even though an acceptable substitute manufacturer may be listed, the product must provide all the functions and features of the specified product or it will not be approved.

Item	Scheduled Manufacturer	Acceptable Manufacturer
Hinges	ives (IVE)	Hager, Stanley
Flush Bolts & Coordinators	ives (IVE)	Burns, Rockwood
Locksets	Corbin-Russwin (C-R)	Compatible with Owner's Existing
Power Supplies	Schlage Electronics (SCE)	Dynalock, Security Door Controls
Door Closers	LCN (LCN)	Sargent, Corbin-Russwin
Protection Plates	Ives (IVE)	Burns, Rockwood
Stops & Holders	Ives (IVE)	Burns, Rockwood
Thresholds & Weatherstrip	Reese (REE)	NGP, Zero
Silencers	Ives (IVE)	Burns, Rockwood
Lock Cores and Keying	Best (BES)	Compatible with Owner's Existing

- D. Hand of Door: Drawings show direction of slide, swing, or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.
- E. Where the hardware specified is not adaptable to the finished shape or size of the members requiring hardware, furnish suitable types having the same operation and quality as the type specified, subject to the Architect's approval.

# 2.02 MATERIALS

# A. Fasteners

- Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation.
- 2. Furnish screws for installation with each hardware item. Finish exposed (exposed under any condition) screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work as closely as possible including "prepared for paint" surfaces to receive painted finish.
- 3. Provide concealed fasteners for hardware units that are exposed when door is closed except to the extent that no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where boit head or nut on opposite face is exposed in other work unless their use is the only means of reinforcing the work adequately to fasten the hardware securely. Review door specification and advise Architect if thru-bolts are required.
- 4. Hardware shall be installed with the fasteners provided by the hardware manufacturer.

# B. Hinges

- 1. Provide five-knuckle, ball bearing hinges of type, material, and height as outlined in the following guide for this specification:
  - a. 1-3/4 inch thick doors, up to and including 36 inches wide: Interior: standard weight, steel, 4-1/2 inches high
- 2. Provide three hinges per door leaf for doors 90 inches or less in height, and one additional hinge for each 30 inches of additional door height.

- 3. Where new hinges are specified for existing doors and/or existing frames, the new hinge size must be identical to hinge preparation present in the existing door and/or existing frame.
- 4. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
  - a. Steel Hinges: Steel pins
  - b. Non-Ferrous Hinges: Stainless steel pins
  - c. Out-Swinging Exterior Doors: Non-removable pins
  - d. Out-Swinging Interior Lockable Doors: Non-removable pins
  - e. Interior Non-lockable Doors: Non-rising pins
- 5. The width of hinges shall be 4-1/2 inches at 1-3/4 inch thick doors, and 5 inches at 2 inches or thicker doors. Adjust hinge width as required for door, frame, and/or wall conditions to allow proper degree of opening.
- 6. Provide hinges with electrified option where specified. Provide with sufficient number and gage of concealed wires to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to the electrified locking component.
- Provide mortar guard for each electrified hinge specified, unless specified in hollow metal frame specification.
- 8. Acceptable manufacturers and/or products: Ives 5BB series, Hager BB series, Stanley FBB Series.

# C. Flush Bolts

- 1. Provide automatic and manual flush bolts with forged bronze face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12 inch steel or brass rods at doors up to 90 inches in height. Top rods at manual flush bolts for doors over 90 inches in height shall be increased by 6 inches for each additional 6 inches of door height. Provide dust-proof strikes at each bottom flush bolt.
- 2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

# D. Coordinators

- 1. Provide a bar-type coordinating device, surface applied to the underside of the stop at the frame head where pairs of doors are equipped with automatic flush bolts, an astragal, or other hardware that requires synchronized closing of the doors.
- Provide a filler bar of the correct length for the unit to span the entire width of the opening, and appropriate brackets for parallel arm door closers and surface vertical rod exit device strikes.
   Factory-prep coordinators for vertical rod devices if required.
- 3. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

# E. Mortise Locks

1. Provide mortise locks certified as ANSI A156.13, Grade 1 Operational, Grade 2 Security, and manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance. Lock case shall be multi-function and field reversible for handing without opening the case. Cylinders: Refer to 2.04 KEYING.

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- Provide locks with a standard 2-3/4 inches backset with a full 3/4 inch throw stainless steel
  mechanical anti-friction latchbolt. Deadbolt shall be a full 1 inch throw, constructed of stainless
  steel.
- Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
- 4. Lever trim shall be solid brass, bronze, or stainless steel, cast or forged in the design specified, with wrought roses and external lever spring cages. Levers shall be thru-bolted to assure proper alignment, and shall have a 2-piece spindle.
  - a. Lever design shall be Corbin Russwin ASA (Armstrong).
  - b. Lever trim on the secure side of doors serving rooms considered by the authority having jurisdiction to be hazardous shall have a tactile warning.
- 5. Acceptable manufacturers and/or products: Corbin Russwin ML2000 series. Any substitution made must be compatible with existing manufacturer.

# F. Power Supplies

- Provide power supplies, recommended and approved by the manufacturer of the electrified locking component, for the operation of electrified locks, electrified exit devices, magnetic locks, electric strikes, and other components requiring a power supply.
- 2. Provide the appropriate quantity of power supplies necessary for the proper operation of the electrified locking component and/or components as recommended by the manufacturer of the electrified locking components with consideration for each electrified component utilizing the power supply, the location of the power supply, and the approved wiring diagrams. Locate the power supplies as directed by the Architect.
- 3. Provide a power supply that is regulated and filtered 24 VDC, or as required, and Ut class 2 listed.
- Provide a power supply, where specified, with the internal capability of charging optional sealed backup batteries 24 VDC, or as required, in addition to operating the DC load.
- Provide a power supply complete requiring only 120VAC to the fused input and shall be supplied in an enclosure.
- 6. Provide a power supply with emergency release terminals, where required, that allow the release of all devices upon activation of the fire alarm system complete with fire alarm input for initiating "no delay" exiting mode.
- Acceptable manufacturers and/or products: Schlage Electronics PS900 series, Dynalock 5000 series, Security Door Controls 600 series.

# G. Door Closers

 Provide door closers certified to ANSI/BHMA A156.4 Grade 1 requirements by a BHMA certified independent testing laboratory. Surface mounted mechanical closers shall be certified to exceed ten million (10,000,000) full load cycles by a recognized independent testing laboratory. Closers shall be ISO 9000 certified. Units shall be stamped with date of manufacture code.

- Door closers shall have fully hydraulic, full rack and pinion action with a high strength cast iron
  cylinder, and shall utilize full complement bearings at shaft. Cylinder body shall be 1-1/2 inch
  diameter, and double heat-treated pinion journal shall be 11/16 inch diameter.
- 3. Provide hydraulic fluid requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F. Fluid shall be fireproof and shall pass the requirements of the UL10C "positive pressure" fire test.
- 4. Spring power shall be continuously adjustable over the full range of closer sizes, and allow for reduced opening force as required by accessibility codes and standards. Hydraulic regulation shall be by tamper-proof, non-critical valves. Closers shall have separate adjustment for latch speed, general speed, and backcheck.
- S. Provide closers with a solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers. When closers are parallel arm mounted, provide closers which mount within a 6-inch top rail without the use of a mounting plate so that closer shall not be visible through vision panel from pull side.
- 6. Closers shall not incorporate Pressure Relief Valve (PRV) technology.
- 7. Closer cylinders, arms, adapter plates, and metal covers shall have a powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A1S6.4 and ASTM B117, or shall have special rust inhibitor (SRI).
- 8. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other finish hardware items interfering with closer mounting.
- 9. Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Closers shall not be visible in corridors, lobbies and other public spaces unless approved by Architect.
- Door closers meeting this specification: LCN 4010/4110 series, Sargent 281/281P10 series factory assembled (without PRV), Corbin-Russwin DC6000 series. Any substitution made must be compatible with existing manufacturer.

# H.-. Protection Plates

- Provide kick plates, minimum of 0.050 inch thick as scheduled. Furnish with machine or wood screws, finished to match plates. Sizes of plates shall be as follows:
  - a. Kick Plates 10 inches high x 2 inches less width of door on single doors, 1 inch less width of door on pairs
- Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

# I. Door Stops and Holders

- 1. Provide door stops for all doors in accordance with the following requirements:
  - Provide wall stops wherever possible. Provide convex type where mortise type locks are used and concave type where cylindrical type locks are used.
  - b. Where wall stops cannot be used, provide dome type floor stops of the proper height.

- At any opening where a wall or floor stop cannot be used, a medium duty surface mounted overhead stop shall be used.
- 2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

# Thresholds, Seals, Door Sweeps, Automatic Door Bottoms, and Gasketing

- 1. Provide thresholds, weatherstripping (including door sweeps, seals, astragals) and gasketing systems (including smoke, sound, and light) as specified and per architectural details. Match finish of other items as closely as possible.
- 2. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
- 3. Acceptable manufacturers and/or products: Reese, National Guard, Zero.

# K. Silencers

- 1. Provide "Push-in" type silencers for each hollow metal or wood frame. Provide three for each single frame and two for each pair frame. Omit where gasketing is specified or required by code.
- 2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

# 2.03 FINISHES

- A. Finish of all hardware shall be US26D (BHMA 626/652) with the exceptions as follows:
  - 1. Protection Plates: US32D (BHMA 630).
  - Door Closers: Powder Coat to Match.
  - 3. Wall Stops: US32D (BHMA 630).

# 2.04 KEYING

- A. Provide cylinder housings to accept permanent cores for the Owner's Existing Best key system conforming to the following requirements:
  - 1. Provide construction cores with construction master keying for use during construction. The Owner or Owner's security agent shall install permanent keyed cores upon completion of the project. The temporary construction cores are to be returned to the hardware supplier.
  - 2. Permanent cores shall be furnished and keyed by the Owner.
  - The hardware supplier, accompanied by a qualified factory representative for the manufacturer of the cores and cylinders, shall meet with Owner and Architect to review keying requirements and lock functions prior to ordering finish hardware.
  - 4. Provide keys as follows
    - a. Three key blanks per lock and/or cylinder.
    - b. Two construction core control keys

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- Six construction master keys for each type (Contractor is to provide one set of construction keys to Architect)
- 5. Deliver all key blanks from the factory or authorized distributor directly to the Owner in sealed containers, return receipt requested. Failure to comply with these requirements may be cause to require replacement of all or any part of the keying system that was compromised at no additional cost to the Owner.
- Approved products: Best. Any substitution made must be compatible with existing manufacturer.

# PART 3 - EXECUTION

# 3.01 EXAMINATION

A. Prior to installation of any hardware, examine all doors, frames, walls and related items for conditions that would prevent proper installation of finish hardware. Correct all defects prior to proceeding with installation.

### 3.02 INSTALLATION

### A. Coordination:

- 1. Prior to installation of hardware, schedule and hold a meeting for the purpose of instructing installers on proper installation and adjustment of finish hardware. Representatives of locks, exit devices, closers, automatic operators, and electrified hardware shall conduct training; provide at least 10 days notice to representatives. After training a letter of compliance, indicating when the training was held and who was in attendance, shall be sent to the Architect.
- B. Hardware will be installed by qualified tradesmen, skilled in the application of commercial grade hardware. For technical assistance if necessary, installers may contact the manufacturer's rep for the ltem in question, as listed in the hardware schedule.
- C. Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames" by the Door and Hardware Institute.
- D. Install each hardware item in compliance with the manufacturer's instructions and recommendations, using only the fasteners provided by the manufacturer.
- E. Do not install surface mounted items until finishes have been completed on the substrate. Protect all installed hardware during painting.
- F. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- G. Operating parts shall move freely and smoothly without binding, sticking, or excessive clearance.
- H. Existing Doors and/or Frames: Remove existing hardware being replaced, tag, and store according to contract documents. Field modify and prepare existing door and/or frame for new hardware being installed. Provide necessary fillers, Dutchmen, reinforcements, and fasteners for mounting new hardware and to cover existing door/frame preps.

# 3.03 ADJUSTING, CLEANING, AND DEMONSTRATING

- A. Adjust and check each operating item of hardware and each door, to insure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly.
- B. Where door hardware is installed more than one month prior to acceptance or occupancy of a space or area, return to the installation during the week prior to acceptance or occupancy and make a final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- C. Clean adjacent surfaces soiled by hardware installation.
- D. Instruct Owner's personnel in the proper adjustment, lubrication, and maintenance of door hardware and hardware finishes.

# 3.04 FIELD QUALITY CONTROL

- A. Prior to Substantial Completion, the installer, accompanied by representatives of the manufacturers of locks, exit devices, closer, and any electrified hardware, shall perform the following work:
  - 1. Examine and re-adjust each Item of door hardware as necessary to restore function of doors and hardware to comply with specified requirements.
  - 2. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures.
  - Replace hardware items that have deteriorated or failed due to faulty design, materials, or installation of hardware units.
  - 4. Prepare a written report of current and predictable problems of substantial nature in the performance of the hardware.
  - 5. At completion of project, a qualified factory representative for the manufacturers of locksets, closer, exit devices, and access control products shall arrange and hold a training session to Instruct the Owner's personnel on the proper maintenance, adjustment, and/or operation of their respective products. After training a letter of compliance, indicating when the training was held and who was in attendance, shall be sent to the Architect.

# 3.0S PROTECTION

A. Provide for the proper protection of complete items of hardware until the Owner accepts the project as complete. Damaged or disfigured hardware shall be replaced or repaired by the responsible party.

# 3.06 HARDWARE SCHEDULE

- A. Provide hardware for each door to comply with requirements of Section "Finish Hardware," hardware set numbers indicated in door schedule, and in the following schedule of hardware sets.
- B. It is intended that the following schedule includes complete items of finish hardware necessary to complete the work. If a discrepancy is found in the schedule, such as a missing item, improper hardware for a frame, door or fire codes, the preamble will be the deciding document.

- Locksets, exit devices, and other hardware items are referenced in the Hardware Sets for series, type, and function. Refer to the preamble for special features, options, cylinders/keying, and other requirements.
- Hardware Sets

Hardware Group No. 01 SINGLE WITH OFFICE LOCK

For use on mark/doo	or #(s):
---------------------	----------

For u	se on m	nark/door #(s):					
003		004	00S	009	010	011	
Provi	de each	SGL door(s) with the	e following:				
Qty		Description		Catalog Number		Finish	Mfr
3	EA	HINGE		SBB1 SERIES AS SPECIFI	ED	652	IVE
1	EA	OFFICE LOCK		ML20S1 ASA CLS6		626	C-R
1	EA	LOCK CORE		PROVIDED BY OWNER			BES
1	EA	DOOR STOP		WS407CCV/F438 AS RE	QUIRED	626	IVE
3	EA	SILENCER		SR64		GRY	IVE

Hardware Group No. 02 SINGLE WITH CLASSROOM LOCK

For use on mark/door #(s):

006

007

014

# Provide each SGL door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	SBB1 SERIES AS SPECIFIED	6S2	IVE
1	EA	CLASSROOM LOCK	ML2055 ASA CLS6	626	C-R
1	EA	LOCK CORE	PROVIDED BY OWNER		BES
1	EA	DOOR STOP	WS407CCV/F438 AS REQUIRED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 03 SINGLE WITH PASSAGE SET

For use on mark/door #(s):

012

# Provide each SGL door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	SBB1 SERIES AS SPECIFIED	6S2	IVE
1	EA	PASSAGE SET	ML2010 ASA	626	C-R
1	EA	DOOR STOP	WS407CCV/F438 AS REQUIRED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

# Hardware Group No. 04 SINGLE WITH CLASSROOM LOCK X CLOSER X INSWING

For use on mark/door #(s):

001

016

Provide each SGL door(s) with the following:

Qty		<b>D</b> escription	Catalog Number	Finish	Mfr
3	EA	HINGE	SBB1 SERIES AS SPECIFIED	<b>6</b> S2	IVE
1	EA	CLASSROOM LOCK	ML20SS ASA CLS6	626	C-R
1	EA	LOCK CORE	PROVIDED BY OWNER		BES
1	EA	SURFACE CLOSER	4011 REG	6B9	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	DOOR STOP	WS407CCV/F438 AS REQUIRED	626	IVE
1	SET	DOOR SEAL	798B	BLK	REE

Hardware Group No. 05 PAIR WITH CLASSROOM LOCK X CLOSER X AUTO FLUSHBOLTS

For use on mark/door #(s):

015

Provide each PR door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
6	EA	HINGE	SBB1 NRP SERIES AS SPECIFIED	6S2	IVE
1	SET	AUTO FLUSH BOLT	FB41P	630	IVE
1	EA	CLASSROOM LOCK	ML20SS ASA CLS6	626	C-R
1	EA	LOCK CORE	PROVIDED BY OWNER		BES
1	EΑ	COORDINATOR	COR X FL	628	IVE
2	EΑ	MOUNTING BRACKET	MB	689	IVE
2	EΑ	SURFACE CLOSER	4111 EDA	689	LCN
2	EA	DOOR STOP	WS407CCV/F438 AS REQUIRED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

# Hardware Group No. 06 SINGLE WITH FAIL SAFE ELECTRIFIED LOCKSET AT STAIRWELL

For use on mark/door #(s):

013

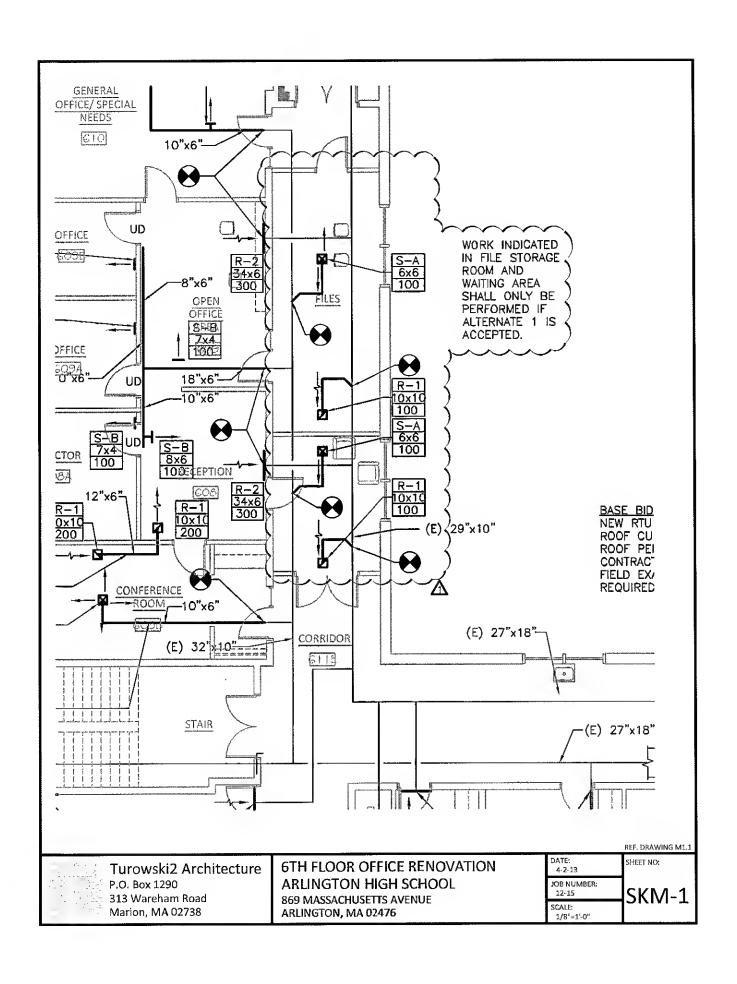
			following:

Qty		Description	Catalog Number	Finish	Mfr IVE
	EA	HINGE	58B1 SERIES AS SPECIFIED	652	IVE
	EA	ELECTRIC HINGE	5BB1 TW8 SERIES AS SPECIFIED	652	IVE
ĭ	E	ELECTRIFIED LOCKSET	ML20903 ASA CLS6 24VDC	626	C-R BES
1	EA	LOCK CORE	PROVIDED BY OWNER		BES
1	EA	SURFACE CLOSER	4111 EDA	689	LCN IVE
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA EA	DOOR STOP	WS407CCV/F438 AS REQUIRED	626	IVE
1	SET	DOOR SEAL	7988	8LK	REE
1	EΑ	DOOR SWEEP	323G	AL	REE
1	SET EA EA	THRESHOLD	S425A	AL	REE REE SCE
1	EA	POWER SUPPLY	PS902-FA	LGR	SCE

DOOR HARDWARE 08 71 00 - 14 ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:

IMMEDIATE EGRESS ALWAYS ALLOWED, ACCESS BY KEY ONLY, LOCKSET TO BE TIED INTO BUILDING'S FIRE/SMOKE ALARM SYSTEM AND FIRE COMMAND CENTER TO UNLOCK IMMEDIATELY UPON ACTIVATION TO ALLOW RE-ENTRY FROM STAIR.

**END OF SECTION** 



# DOOR SECURITY SYSTEM

POWER SUPPLY FOR MAGNĚTIC LOČKS ANĎ EL ĚCTRIC LOCKS FURNISHED @ DOOR BY DOOR HARDWARE CONTRACTOR. ELECTRICAL CONTRACTOR SHALL SUPPLY 120 VAC CIRCUITS. TIE IN PER E.C. EXACT REQUIREMENTS, WIRED & INSTALLED BY E.C. CONTRACTOR. PT

ELECTRIC LATCH RETRACTION DEVICE FURNISHED AND INSTALLED BY HARDWARE CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. E.C. TO PROVIDE 3/4" CONDUIT TO NEAREST ACCESSIBLE CERMING SPACE. EC

ELECTROMAGNETIC LOCK - F&I BY HARDWARE, WIRED BY E.C.  $\mathbb{M}$  ELECTRIC LOCK FURNISHED AND INSTALLED BY HARDWARE CONTRACTOR, WIRED BY E.C. 3/4" CONDUIT AND PULL STRING BY E.C.

4" SQ. x 2 1/2" DOOR JUNCTION BOX BY EC.

ĚLEČTRIC HÌNGE DEVICE FURNISHEĎ ANĎ INŠTALLED BY HAŘDWARE CONTŘAČŤOR, H

WIRED BY E.C.

REFERENCE DRAWING: E0.1 SYMBOL LIST, LIGHTING FIXTURE SCHEDULE AND NOTES

CONSULTANT

**Turowski2 Architecture** 

313 Wareham Road Marion, MA 02738

P.O. Box 1290

GARCIA-GALUSKA-DESOUSA
CONSULTING ENGINEERS
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SUCHESPENDS \* PAX SOCIED SEASE, MA STATE TOWN
SUCHESPENDS \* PAX SOCIED SEASE, MASS \* \* \*

6TH FLOOR OFFICE RENOVATION ARLINGTON HIGH SCHOOL 869 MASSACHUSETTS AVENUE ARLINGTON, MA 02476

JOB NUMBER: 12-15 DATE: 04-02-2013 SCALE: N.T.S.

SKE-1

SHEET NO:

ADDENDUM #1

